WE CLAIM AS OUR INVENTION:

1. A method for reciprocal adaptation of a plurality of microphones of a hearing device, comprising the steps of:

receiving incoming audio signals respectively with a plurality of microphones, with each microphone generating an output signal dependent on the audio signals received by that microphone, said microphones having respectively different sensitivities such that a difference exists between a first output signal from a first of said plurality of microphones and a second output signal from a second of said plurality of microphones;

measuring a first amplitude of said first output signal in a predetermined frequency range;

measuring a second amplitude of said second output signal in said predetermined frequency range; and

reducing said difference by filtering said first output signal dependent on said first amplitude and on said second amplitude.

2. A method as claimed in claim 1 comprising employing at least one frequency band below 150 Hz as said predetermined frequency range.

3. A method as claimed in claim 1 comprising employing at least one frequency band selected from the group consisting of a frequency band between 40 and 60 Hz and a frequency band between 80 and 120 Hz as said predetermined frequency range.

4. A method as claimed in claim 1 comprising conducting said filtering in a feedback regulation loop, and employing parameters in said loop for equalizing said first and second amplitudes.

5. A method as claimed in claim 1 comprising employing a filter, for filtering said first output signal, having a transfer function with a numerator polynomial and a denominator polynomial, and wherein the step of filtering said first output signal comprises multiplying said first output signal with one of said numerator polynomial or said denominator polynomial.

6. A method as claimed in claim 5 comprising conducting said filtering in a feedback regulation loop containing said filter, and varying only said numerator polynomial in said feedback regulation loop for equalizing said first and second amplitudes.

7. A method as claimed in claim 5 comprising conducting said filtering in a feedback regulation loop containing said filter, and varying both said numerator polynomial and said denominator polynomial in said feedback regulation loop for equalizing said first and second amplitudes.

8. A method as claimed in claim 1 wherein said first output signal has a magnitude and a phase, and comprising filtering said first output signal to modify at least one of said magnitude and said phase.

9. A hearing device comprising

a plurality of microphones for receiving incoming audio signals, each microphone generating an output signal dependent on the audio signals received by that microphone, said microphones having respectively different sensitivities such that a difference exists between a first output signal from a first of said plurality of microphones and a second output signal from a second of said plurality of microphones;

a first measurement unit measuring a first amplitude of said first output signal in a predetermined frequency range;

a second measurement unit measuring a second amplitude of said second output signal in said predetermined frequency range; and

a filter for reducing said difference by filtering said first output signal dependent on said first amplitude and on said second amplitude.

10. A device as claimed in claim 9 wherein said first and second measurement units respectively measure said first and second amplitudes in at least one frequency band below 150 Hz as said predetermined frequency range.

11. A device as claimed in claim 9 wherein said first and second measurement units respectively measure said first and second amplitudes in at least one frequency band selected from the group consisting of a frequency

band between 40 and 60 Hz and a frequency band between 80 and 120 Hz as said predetermined frequency range.

12. A device as claimed in claim 9 comprising a feedback regulation loop containing said filter for equalizing said first and second amplitudes.

13. A device as claimed in claim 9 wherein said filter has a transfer function with a numerator polynomial and a denominator polynomial, and wherein said filter filters said first output signal by multiplying said first output signal with one of said numerator polynomial or said denominator polynomial.

14. A device as claimed in claim 13 comprising a feedback regulation loop containing said filter for varying only said numerator polynomial for equalizing said first and second amplitudes.

15. A device as claimed in claim 13 comprising a feedback regulation loop containing said filter for varying both said numerator polynomial and said denominator polynomial for equalizing said first and second amplitudes.

16. A device as claimed in claim 9 wherein said first output signal has a magnitude and a phase, and wherein said filter filters said first output signal to modify at least one of said magnitude and said phase.